

Appl. No. 09/896,153
Amdt. Dated June 26, 2005
Reply to Office Action of Jan. 25 2005

NC 29298

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1 Claim 1 (currently amended): In a wireless communication system method in which an
2 ~~electronic device processes signals received from at least one base station, a method for~~
3 ~~processing signal, comprising the acts of:~~
- 4 receiving a current frame signal, wherein said current frame signal is received
5 ~~substantially~~ during reception of a current frame of the wireless communication system;
- 6 storing said current frame signal in a memory to be evaluated ~~substantially~~ during
7 reception of a next frame of the wireless communication system;
- 8 ~~determining, substantially simultaneously to while~~ storing said current frame signal, if a
9 selected data packet is contained within a previous frame signal, using a previous frame
10 signaling information, wherein said previous frame signal was stored in said memory and
11 said frame signaling information was extracted ~~substantially~~ during reception of a
12 previous frame of the communication system; and
- 13 ~~processing, substantially simultaneously to while~~ storing said current frame signal, said
14 previous frame signal ~~substantially~~ during reception of said current frame, if determined
15 that said previous frame signal contained said data packet for the electronic device.
- 1 Claim 2 (currently amended): The method as claimed in claim 1, wherein the act of
2 processing said previous frame signal comprises an act of replaying, ~~substantially~~ during
3 reception of said current frame, said previous frame signal stored in said memory.
- 1 Claim 3 (original): The method as claimed in claim 1, wherein the act of processing said
2 previous frame signal comprises an act of de-spreading said previous frame signal using said
3 previous frame signaling information to retrieve said data packet.

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1 Claim 4 (original): The method as claimed in claim 1, wherein the act of receiving said current
2 frame signal comprises an act of receiving said current frame signal comprises at least one
3 control channel, at least one supplemental channel and at least one dedicated channel.

1 Claim 5 (original): The method as claimed in claim 4, further comprises an act of decoding
2 said at least one control channel by a control channel decoder during reception of said current
3 frame.

1 Claim 6 (original): The method as claimed in claim 1, wherein the act of processing said
2 previous frame signal comprises an act of de-spreading said previous frame signal, wherein
3 said previous frame signal comprises at least one supplemental channel.

1 Claim 7 (original): The method as claimed in claim 6, wherein the act of processing said
2 previous frame signal comprises an act of decoding said at least one supplemental channel
3 during said current frame.

1 Claim 8 (original): The method as claimed in claim 1, wherein the act of processing said
2 previous frame signal comprises an act of de-spreading said previous frame signal, wherein
3 said previous frame signal comprises at least one control channel and at least one
4 supplemental channel.

1 Claim 9 (original): The method as claimed in claim 8, wherein the act of processing said
2 previous frame signal comprises an act of decoding said at least one control channel and
3 thereafter decoding said at least one supplemental channel.

1 Claim 10 (currently amended): An electronic device operable in a wireless communication
2 system in which communication signals are communicated between a base station and the
3 electronic device, the electronic device comprising:

4 an analog to digital (A2D) converter, said A2D converter for receiving and converting a
5 signal to generate a current frame signal;

6
7 a memory coupled to said A2D converter, said memory receiving said current frame
8 signal and storing said current frame signal in said memory;

9
10 a rake receiver coupled to said A2D converter, said receiver for receiving said current
11 frame signal and extracting a current frame signaling information from said current frame
12 signal; and

13
14 a master controller coupled to said memory, said master controller for processing a
15 previous frame signal, wherein said previous frame signal is stored in memory; said

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16 master further for using a previous frame signalling information, wherein said previous
17 frame signaling information extracted during reception of a previous frame, to determine
18 how to process said previous frame signal.

1 Claim 11(original): The electronic device as claimed in claim 10, wherein said current frame
2 signal comprises at least one control channel, at least one supplemental channels and at
3 least one dedicated channel.

1 Claim 12 (original): The electronic device as claimed in claim 11, further comprises:
2 a control channel decoder coupled to said A2D converter, said control channel decoder
3 for decoding said at least one control channel of said current frame signal.

1 Claim 13 (original): The electronic device as claimed in claim 12, wherein
2 said previous frame signal comprises at least one supplemental channel; and
3 said master controller further for decoding said at least one supplemental channel of said
4 previous frame signal and using said previous frame signaling information.

1 Claim 14 (original): The electronic device as claimed in claim 13, wherein said master
2 controller for determining if a selected data packet was received on said at least one
3 supplemental channel of said previous frame signal, prior to decoding said at least one
4 supplemental channel.

1 Claim 15 (original): The electronic device as claimed in claim 10, wherein said previous frame
2 signal comprises at least one control channel, at least one supplemental channel and at least
3 one dedicated channel.

1 Claim 16 (original): The electronic device as claimed in claim 15, wherein said master
2 controller further for decoding said at least one control channel and thereafter decoding said
3 at least one supplemental channel of said previous frame signal.

1 Claim 17 (original): The electronic device as claimed in claim 10, wherein said memory
2 comprises a first buffer and a second buffer.

1 Claim 18 (original): The electronic device as claimed in claim 17, wherein said master
2 controller comprises logic to control the use of said first buffer and said second buffer.

1 Claim 19 (currently amended): In a wireless communication system in which an electronic
2 device processes signals received from at least one base station, the electronic device
3 comprising:

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4 a front end for receiving a current frame signal, wherein said current frame signal is
5 received ~~substantially~~ during reception of a current frame of the wireless communication
6 system;
7 a memory for storing said current frame signal, said memory for further storing a previous
8 frame signal, wherein said previous frame signal stored ~~substantially~~ during reception of a
9 previous frame of the communication system; and
10 a controller for determining, ~~substantially simultaneously to~~ while storing said current
11 frame signal, if a selected data packet is contained within said previous frame signal,
12 using a previous frame signaling information, wherein said frame signaling information
13 was extracted ~~substantially~~ during reception of a previous frame of the communication
14 system; said controller further for processing during reception of said current frame,
15 ~~substantially simultaneously to~~ while storing said current frame signal, said previous
16 frame signal if determined that said previous frame signal contained said data packet for
17 the electronic device.

1 Claim 20 (original): The electronic device as claimed in claim 19, said current frame signal
2 comprises a Walsh code assignments, at least one dedicated channel, at least one control
3 channel and at least one supplement channel.

1 Claim 21 (original): The electronic device as claimed in claim 20, further comprises a control
2 channel decoder for decoding said at least one control channel of said current frame signal.

1 Claim 22 (original): The electronic device as claimed in claim 21, wherein said controller for
2 processing said at least one supplemental channel of said previous frame signal ~~substantially~~
3 during reception of current frame.

1 Claim 23 (currently amended): In a wireless communication system method ~~in which an~~
2 ~~electronic device processes signals received from at least one base station, a method for~~
3 ~~processing signal, comprising the acts of:~~

4 receiving a current frame signal, wherein said current frame signal is received
5 ~~substantially~~ during reception of a current frame of the wireless communication system;
6 storing said current frame signal in a memory;
7 retrieving, ~~substantially simultaneously to~~ while storing said current frame signal, a
8 previous frame signaling information, said previous frame signaling information extracted
9 during the reception of a previous frame of the wireless communication system;

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10 ~~determining, substantially simultaneously to~~ while storing said current frame signal, using
11 said previous frame signaling information, if a selected data packet is contained within a
12 previous frame signal, wherein said previous frame signal was stored in said memory
13 ~~substantially~~ during reception of said previous frame of the communication system; and
14 processing, ~~substantially simultaneously to~~ while storing said current frame signal and
15 ~~substantially~~ during reception of said current frame, said previous frame signal using said
16 previous frame signaling information, if determined that said previous frame signal
17 contained said data packet.

1 Claim 24 (new): An electronic device comprising:
2 means for receiving a current frame signal, wherein said current frame signal is received
3 during reception of a current frame of the wireless communication system;
4 means for storing said current frame signal in a memory to be evaluated during reception
5 of a next frame of the wireless communication system;
6 means for determining while storing said current frame signal, if a selected data packet is
7 contained within a previous frame signal, using a previous frame signaling information,
8 wherein said previous frame signal was stored in said memory and said frame signaling
9 information was extracted during reception of a previous frame of the communication
10 system; and
11 means for processing while storing said current frame signal, said previous frame signal
12 during reception of said current frame, if determined that said previous frame signal
13 contained said data packet for the electronic device.

1 Claim 25 (new): The electronic device as claimed in claim 24, wherein the wireless
2 communication system is a 1xEV-DO system.

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